

IN THE CLAIMS:

1. (Currently Amended) A method of updating bias of a ~~signal~~ model of a speech signal in a sequential manner, comprising the steps of:

introducing an adjustable bias in ~~a~~ the distribution parameter of a Hidden Markov Model (HMM) of a signal ~~the signals~~;

~~updating the adjustable bias every time a new observation of the signal is available; and~~
~~calculating a correction item for the adjustable bias based on each new observation used in~~
~~recognizing the signal; and~~

~~updating the adjustable bias by adding the correction item thereto~~ ~~the updated new bias by~~
~~adding a correction item to the old bias.~~

2. (Currently Amended) The method of claim 1 wherein the adjustable bias can be defined on each state of the HMM state.

3. (Currently Amended) The method of claim 1 wherein the adjustable bias is shared among different states of the HMM.

4. (Currently Amended) The method of claim 1 wherein the adjustable bias is shared by groups of states of the HMM.

5. (Currently Amended) The method of claim 1 wherein the adjustable bias is shared by all states of the HMM ~~the distribution of a recognizer~~.

6. (Currently Amended) The method of claim 1 wherein the correction term is calculated based on ~~the information of both current model parameters~~ of the HMM and the new observation ~~incoming observed signals~~.

7. (Currently Amended) The method of claim 1 wherein the correction term is calculated based on ~~the information of~~ both information derived from all signals provided to a the recognizer for said recognizing and the new observation ~~incoming observed signals~~.

8. (Original) The method of claim 1 wherein the signal comprises a speech signal.

9. (Currently Amended) The method of claim 1 wherein new available data from the a new observation ~~of the signals~~ could be based on any length.

10. (Currently Amended) The method of claim 1 wherein the ~~new available data from a~~ new observation is a frame.

11. (Currently Amended) The method of claim 1 wherein the ~~new available data from a~~ new observation is an [[,]] utterance.

12. (Currently Amended) The method of claim 1 wherein the ~~new available data from a~~ new observation is every fixed length of the ~~speech~~ signal.

13. (Currently Amended) The method of claim 1 wherein the ~~new available data from a~~ new observation is based on every 10 minutes of the ~~speech~~ signal.

14. (Currently Amended) The method of claim 1 wherein the correction item is a the product of a ~~any~~ sequence whose limit is zero, whose summation is infinity and whose square summation is not infinity and the summation of ~~the~~ quantities weighted by a probability, the quantities are based on a ~~the~~ divergence of desired model parameter and observed signal.